

In the Claims:

1. (Currently Amended) A method of ~~regulating~~ inhibiting an inflammation inflammatory mediator in a subject comprising:

administering a therapeutically effective amount of a pharmaceutical composition comprising a MANS peptide consisting of an amino acid sequence of SEQ ID NO: 1 active fragment thereof, in an amount effective to inhibit ~~regulate an inflammation~~ said inflammatory mediator.

2. (Currently Amended) The method according to claim 1, wherein said active fragment of the MANS ~~protein~~ peptide comprises at least six amino acids and retains its ability to inhibit an inflammatory mediator.

3. (Currently Amended) The method according to claim 1, wherein said inflammatory mediator results in an inflammation is caused by respiratory diseases, bowel diseases, skin diseases, autoimmune diseases and pain syndromes.

4. (Currently Amended) The method according to claim 4 3, wherein said respiratory diseases are selected from the group consisting of asthma, chronic bronchitis, and COPD.

5. – 7. (Canceled)

8. (Original) The method according to claim 1, wherein said subject is a mammal.

9. (Original) The method according to claim 8, wherein said mammal is selected from the group consisting of humans, canines, equines and felines.

10. (Original) The method according to claim 1, wherein said administering step is selected from the group consisting of topical administration, parenteral administration,

rectal administration, pulmonary administration, nasal administration, inhalation and oral administration.

11. (Currently Amended) The method according to claim 10, wherein said pulmonary administration is selected from the group consisting of aerosol, dry powder inhaler, metered dose inhaler, and nebulizer.

12. (Currently Amended) A method for ~~regulating~~ inhibiting a cellular secretory process in a subject comprising:

administering a therapeutically effective amount of a compound comprising a MANS peptide consisting of an amino acid sequence of SEQ ID NO: 1 or an active fragment thereof, that ~~regulates~~ inhibits an inflammatory mediator a cellular secretory process in a subject.

13. (Currently Amended) The method according to claim 12, wherein said active fragment of the MANS ~~protein~~ peptide comprises at least six amino acids and retains its ability to inhibit an inflammatory mediator.

14. (Currently Amended) The method according to claim 12, wherein said ~~regulating~~ inhibiting a cellular secretory process is blocking or reducing a cellular secretory process.

15. - 19. (Canceled)

20. (Original) The method according to claim 12, wherein said subject is a mammal.

21. (Original) The method according to claim 20, wherein said mammal is selected from the group consisting of humans, canines, equines and felines.

22. (Original) The method according to claim 12, wherein said administering step is selected from the group consisting of topical administration, parenteral administration,

rectal administration, pulmonary administration, nasal administration, inhalation and oral administration.

23. (Original) The method according to claim 22, wherein said pulmonary administration is selected from the group of aerosol, dry powder inhaler, metered dose inhaler, and nebulizer.

24. (Currently Amended) A method of reducing ~~inflammation~~ an inflammatory mediator in a subject comprising:

administering a therapeutically effective amount of a compound that inhibits the MARCKS-related release of inflammatory mediators, whereby mucus secretion in the subject is reduced compared to that which would occur in the absence of said treatment.

25. (Original) The method according to claim 24, wherein said compound is an active fragment of a MARCKS protein.

26. (Currently Amended) The method according to claim 25, wherein said active fragment is at least six amino acids in length and retains its ability to inhibit an inflammatory mediator.

27. (Currently Amended) The method according to claim 24, wherein said compound is a MANS peptide consisting of an amino acid sequence of SEQ ID NO: 1 or an active fragment thereof.

28. – 30. (Canceled)

31. (Currently Amended) A method of reducing ~~inflammation~~ an inflammatory mediator in a subject comprising:

administering a therapeutically effective amount of a compound that inhibits the MARCKS-related release of inflammatory mediators, whereby the ~~inflammation~~ inflammatory mediators in the subject is are reduced compared to that which would occur in the absence of said treatment.

32. (Original) The method according to claim 31, wherein said compound is an active fragment of a MARCKS protein.

33. (Currently Amended) The method according to claim 32, wherein said active fragment is at least six amino acids in length and retains its ability to inhibit an inflammatory mediator.

34. (Currently Amended) The method according to claim 31, wherein said compound is a MANS peptide consisting of an amino acid sequence of SEQ ID NO: 1 or an active fragment thereof.

35. – 36. (Canceled)

37. (Currently Amended) A method of regulating mucin granule release in a subject comprising:

administering a compound that regulates mucin granule release, whereby mucin granules are reduced as compared to that which would occur in the absence of said mucin granules, thus regulating mucin granule release in a subject.

38. (Original) The method according to claim 37, wherein said compound is an active fragment of a MARCKS protein.

39. (Original) The method according to claim 37, wherein said compound is a MANS peptide.

40. (Currently Amended) A method of regulating exocytotic secretion of airway mucin granules in a subject comprising:

administering a compound that ~~regulates~~ inhibits mucin granule release, whereby mucin granules are reduced as compared to that which would occur in the absence of said mucin granules, thus regulating exocytotic secretion of airway mucin granules in a subject.

41. (Original) The method according to claim 40, wherein said compound is an active fragment of a MARCKS protein.

42. (Original) The method according to claim 40, wherein said compound is a MANS peptide.

43. – 46. (Canceled)

47. (Currently Amended) A method of reducing or inhibiting ~~inflammation~~ an inflammatory mediator in a subject comprising:

administering a therapeutically effective amount of a MANS peptide consisting of an amino acid sequence of SEQ ID NO: 1 or an active fragment thereof effective to ~~modulate~~ reduce or inhibit an inflammatory mediator at the inflammation site inflammatory mediator in a subject.

48. (Currently Amended) The method according to claim ~~28~~ 47, wherein said active fragment is at least six amino acids in length and retains its ability to inhibit an inflammatory mediator.

49. (Original) The method according to claim 47, wherein said inflammatory mediators are produced by cells selected from the group consisting of neutrophils, basophils, eosinophils, monocytes and leukocytes.

50. (Currently Amended) The method according to claim 47, wherein the ~~agent~~ therapeutically effective amount of a MANS peptide or an active fragment thereof is administered orally, parenterally, cavitarily, rectally or through an air passage.

51. (Currently Amended) The method of claim 47, ~~wherein said composition~~ further ~~comprises~~ comprising administering a second molecule selected from the group consisting of an antibiotic, an antiviral compound, an antiparasitic compound, an anti-inflammatory compound, and an immunosuppressant.